The following guide explains how to setup and use the HP Z1 G2 Intel® vPro™ Technology workstation SyAM Software, System Client and System Area Manager for performing the AMT out of band management functions.

System Configuration

- HP Z1 G2 Workstation – BIOS L52 v01.11
- AMT firmware version - 8.1.0-build 1265
- Intel Xeon CPU E3-1245 V3 @ 3.40GHz
- 2 x 8GB DDR3 1600mhz
- Windows 8.1 Professional 64-bit
- Network Adapter: Intel 82579LM Gigabit Network Connection 11.15.16.0
- Display Adapter: Intel HD Graphics P4600/4700 10.18.10.3412
- Intel Management Engine Interface 9.0.21-build 1462
- SyAM System Client V4.53 or above

Browser Requirements on a second system

- Internet Explorer 10 or above, Firefox v28 or Chrome v34 above
- Java runtime plugin for your web browser – security set to medium

***Note**
When using NVidia Quadro K610 or K2100M graphics cards they will disable the AMT KVM capability.

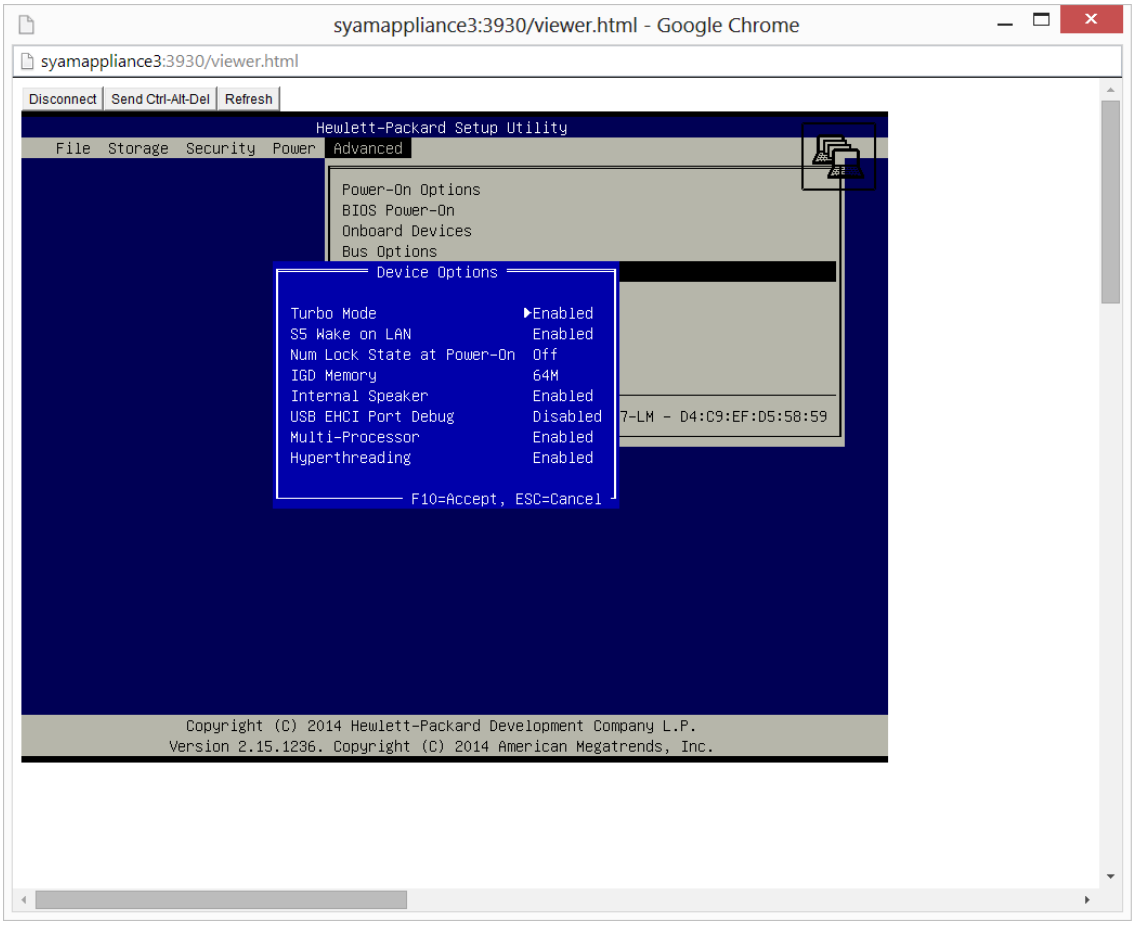
BIOS Settings

Enter BIOS Setup (F10)

1. Load Optimized Defaults

Then ensure that the IGD Memory Setting is visible and set

2. Enabled Integrated Video



Note: This field in BIOS won't be visible and AMT KVM won't with the NVidia Quadro K610 or K2100M video card installed.

Save and Reboot the system.

AMT ME Setup

As the system boots press Ctrl P to Enter AMT ME setup

The default login for AMT ME is

Username = admin
Password = admin
This must be changed to an 8 character strong password (example P@ssw0rd)

Once in, configure the AMT ME settings.

AMT Management Engine Settings

Intel ME General Settings

Change Intel ME Password

FW Update Settings

Set PRTC

Power Control

- Intel ME ON in Host Sleep States — Desktop: On in S0, ME Wake in S3, S4-5

Intel AMT Configuration

Manageability Feature Selection

SOL/IDER/KVM

- Username and Password — Enable
- SOL — Enable
- IDER — Enable
- Legacy Redirection Mode — Enable
- KVM — Enable

User Consent

- User Opt-in — None
- Pot-in Configurable from Remote IT — Enable Remote Control of KVM Pot-In Policy

Password Policy

Network Setup

- Intel ME Network Name Settings
  - Host Name — HPZ1-G2
  - Domain Name — SYAM
  - Shared/Dedicated FQDN — Shared
  - Dynamic DNS Update — Disabled
- TCP/ IP Settings
  - Wired LAN IPV4 Configuration
    - DHCP Mode — Disabled
    - IPV4 Address — 192.168.200.18
    - Subnet Mask Address — 255.255.255.0
    - Default Gateway Address — 192.168.200.1
    - Preferred DNS Address. — 192.168.200.1
    - Alternate DNS Address — 192.168.100.1
  - Wired LAN IPV6 Configuration

Remote Setup and Configuration

- Current Provisioning Mode
- Provisioning Record

Save Changes and Exit

Static IP was used for testing but DHCP Mode can be set to enabled

AMT KVM Doesn't Work With the NVidia Quadro K610 or K2100M video card installed

SyAM Software System Area Manager Setup

On a separate system install the SyAM System Area Manager v4.53 or above.

On the system running the System Area Manager copy any iso or img images that you wish to use for AMT IDER to the c:\syam\ider\ folder

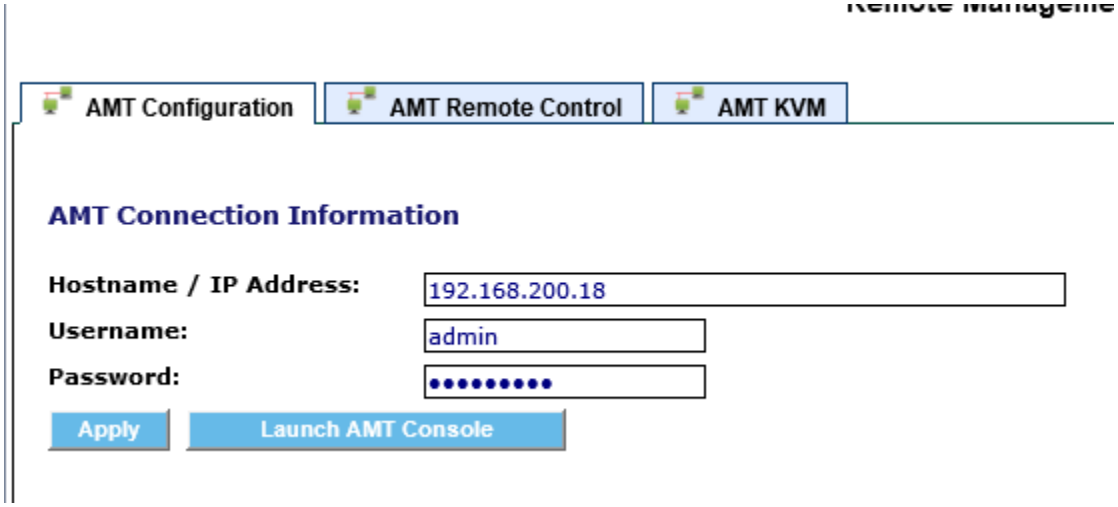
Open up a web browser and browse to the System Area Manager.

http://systemname:3930

1. Log in using your Windows username and password. This will become the default administrator. For adding additional users please see the System Area Manager User Manual.
2. From the drop down menu at the top right choose “Add Managed System”.
3. Enter the IP address of the HP Z1 G2 system in the From and To boxes, press apply, this will now add the HP Z1 G2 system to the Management Tree.
4. Click on the HP Z1 G2 system on the tree. This will now expand to show 7 icons. Click on the second icon “Remote Management”.

5. Click on the AMT tab and then enter the IP Address, Username and Password configured for AMT. Press the Apply button to save the data. The IP address box is automatically populated with the OS IP Address so if using DHCP for the Operating

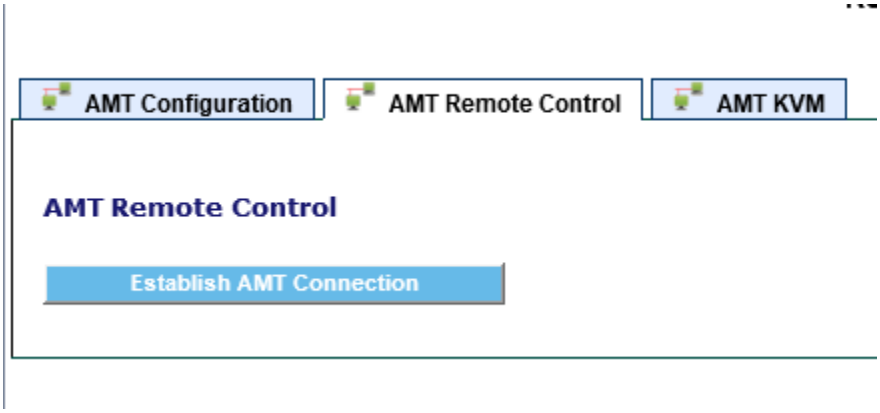
system and AMT do not edit the IP address field. If you edit the IP address field it will be treated as a static IP address and will not change even if the OS IP address changes.



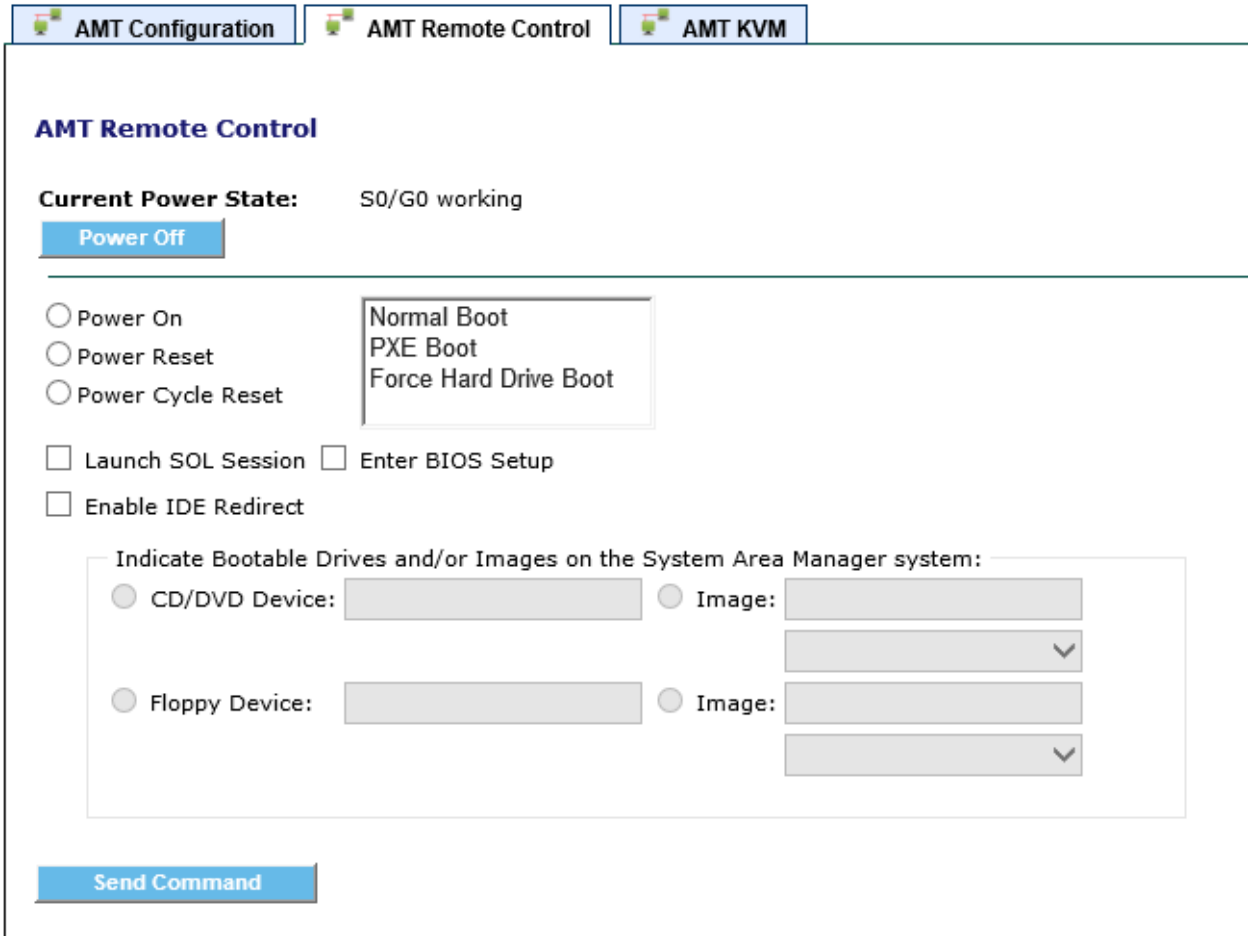
AMT Remote Control

Now that you have AMT configured in the System Area Manager you can perform direct power controls to the AMT system.

1. Click on the AMT Remote Control Tab, and then click on the Establish AMT Connection button.



2. It will now show you the current Power Status of the system.



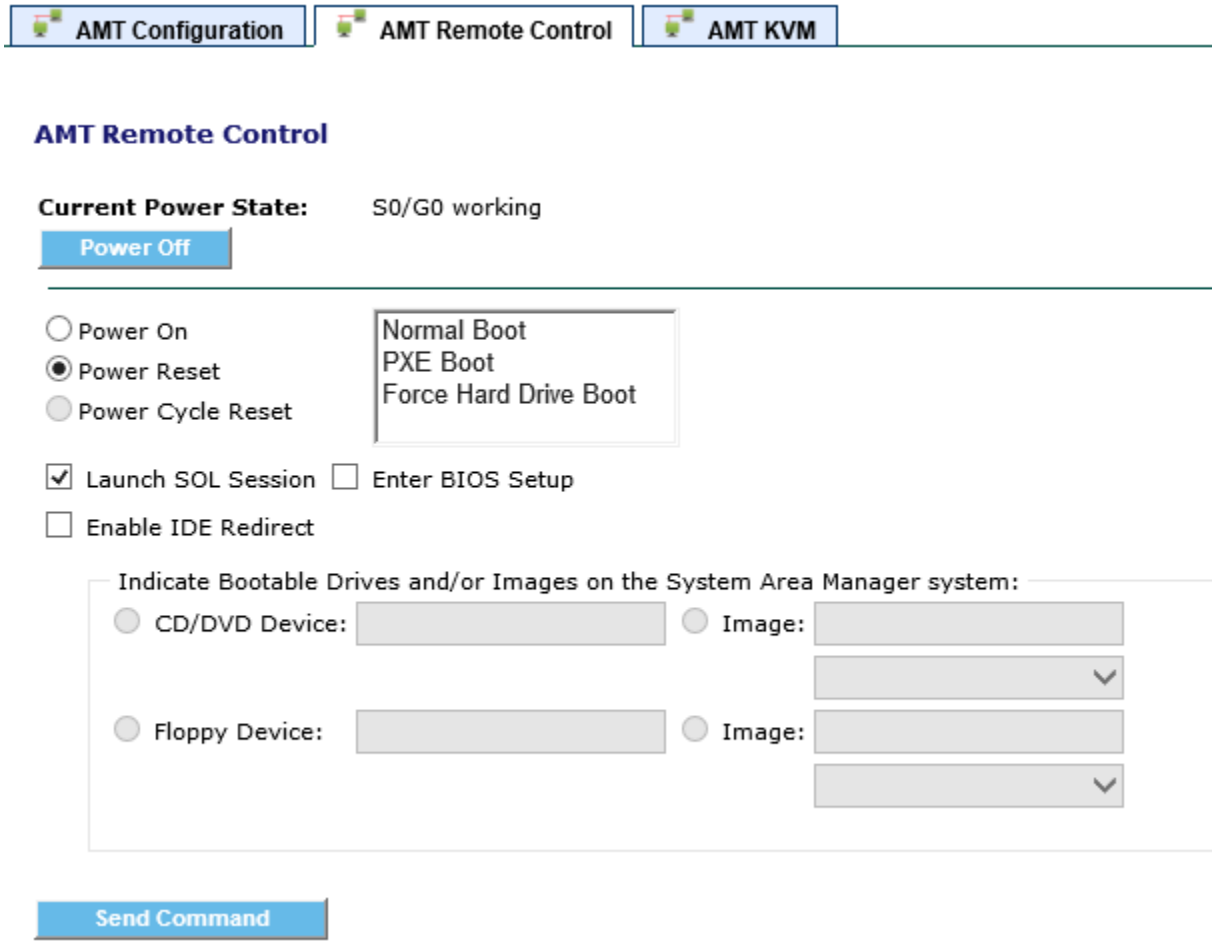
3. Choose the power option you wish to perform by either clicking the Power Off button (If the system is on or choosing the Power On radio button (If the system is off) or Power Reset radio button (If the system is powered on). Then press the Send Command Button.

Z1 G2 vPro Serial Over LAN

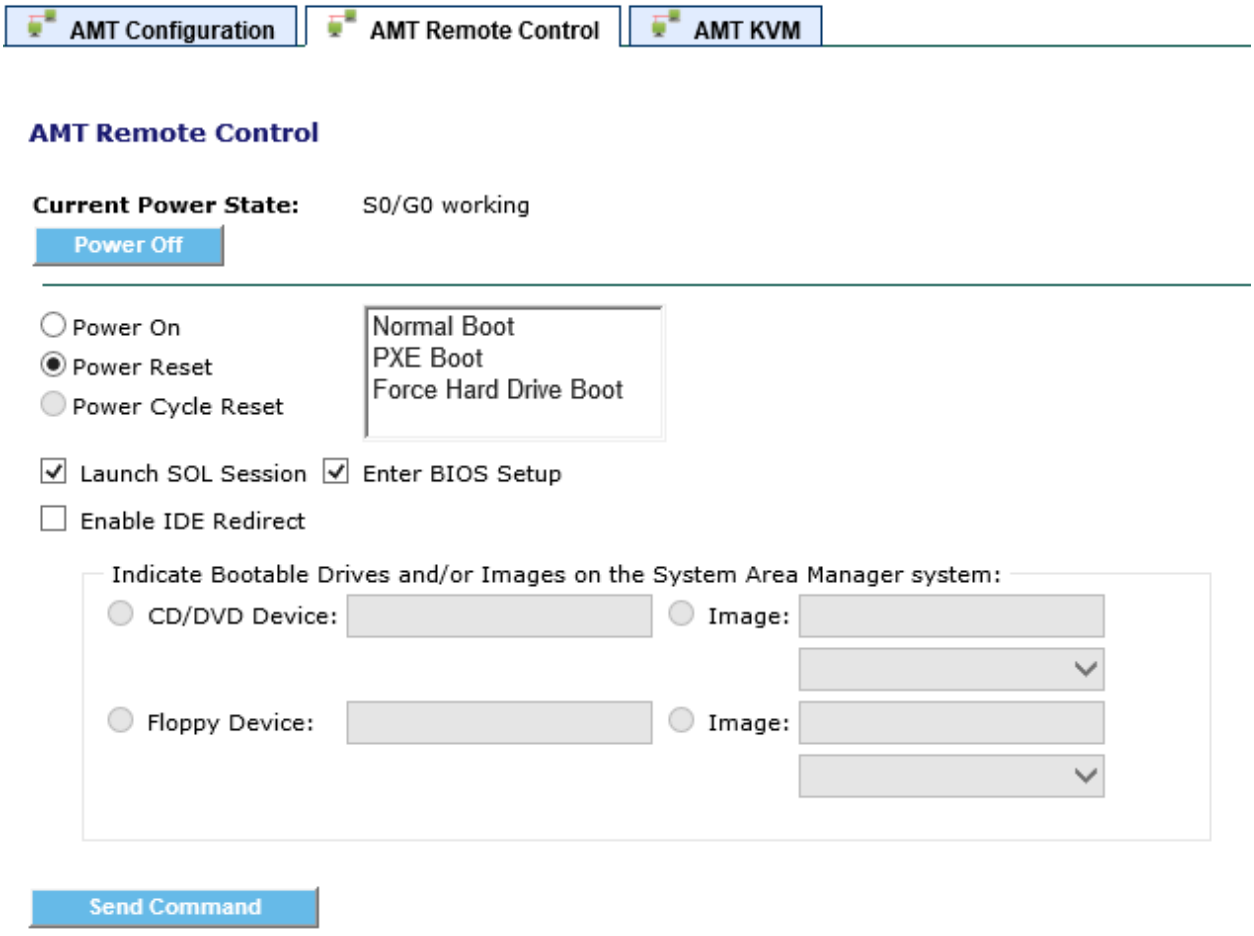
With SyAM Software and the AMT configured HP Z1 G2 system you can access the system as it boots up, enabling you to access the BIOS to make BIOS changes, etc.

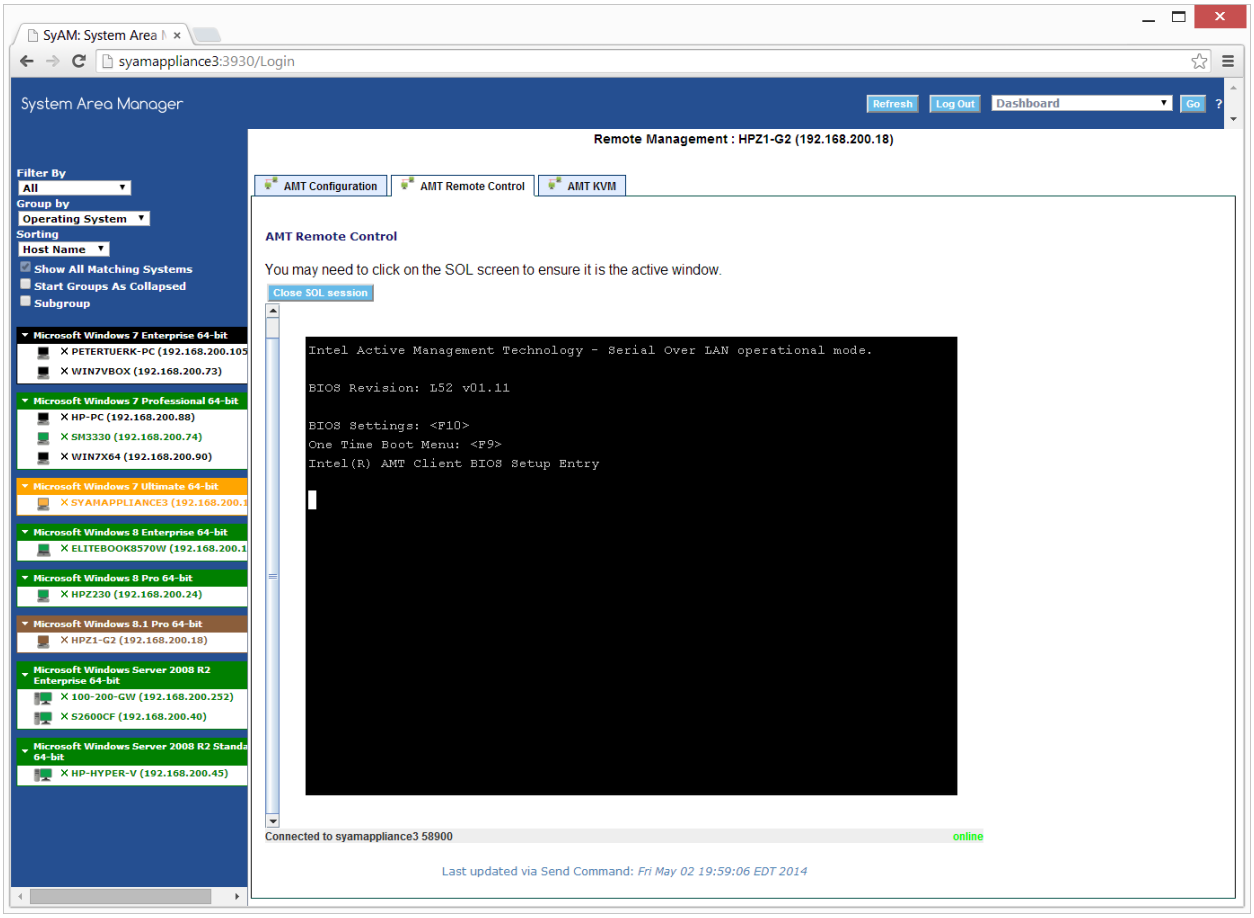
Serial Over LAN is only available as the system powers on.

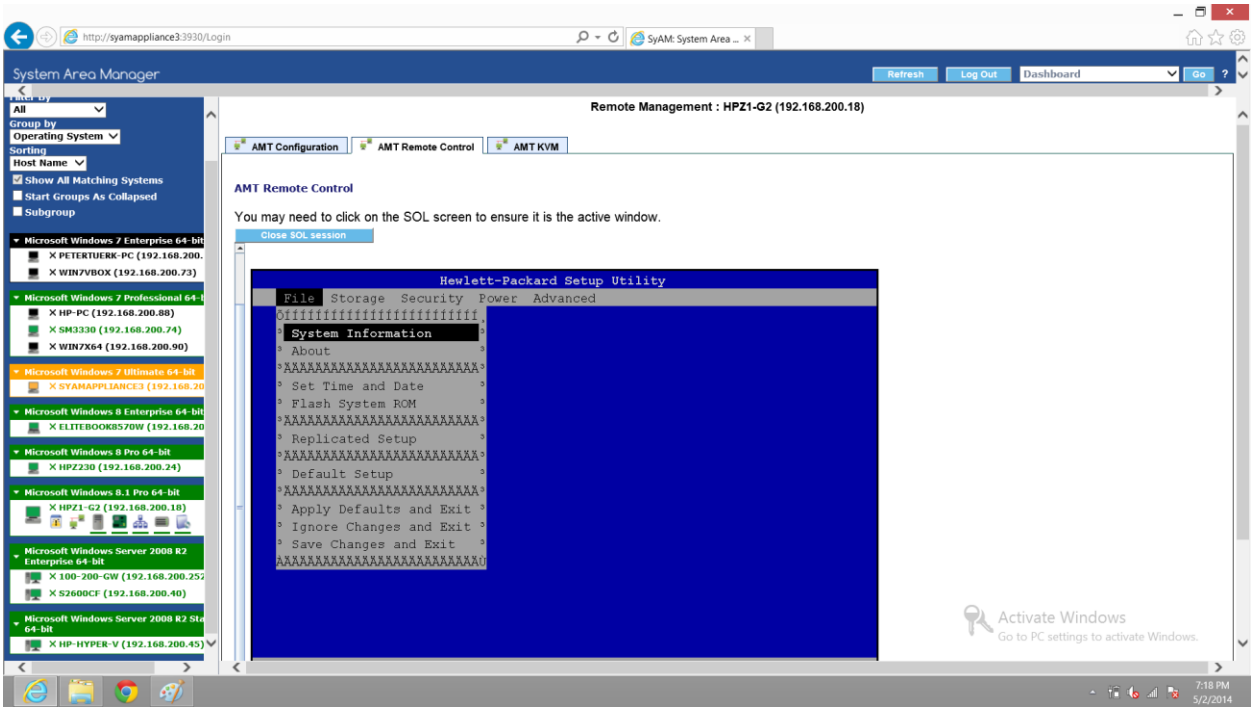
1. Click on AMT Remote Control; establish connection.
2. Either click the Power On radio button (if the system status is Off) or the Power Reset radio button (if the system status is On). Also, check off the Launch SOL check box. Now click the Send Command button.



3. This will bring up the Serial Over LAN console in your web browser. Click on the console and press F2 or the DEL key to enter BIOS when the message comes up. Should you need to reboot the system you can press the Power reset button. Youcan also enter BIOS through the remote control but clicking both the launch SOL, and enter BIOS setup boxes before clicking the Send Command button.



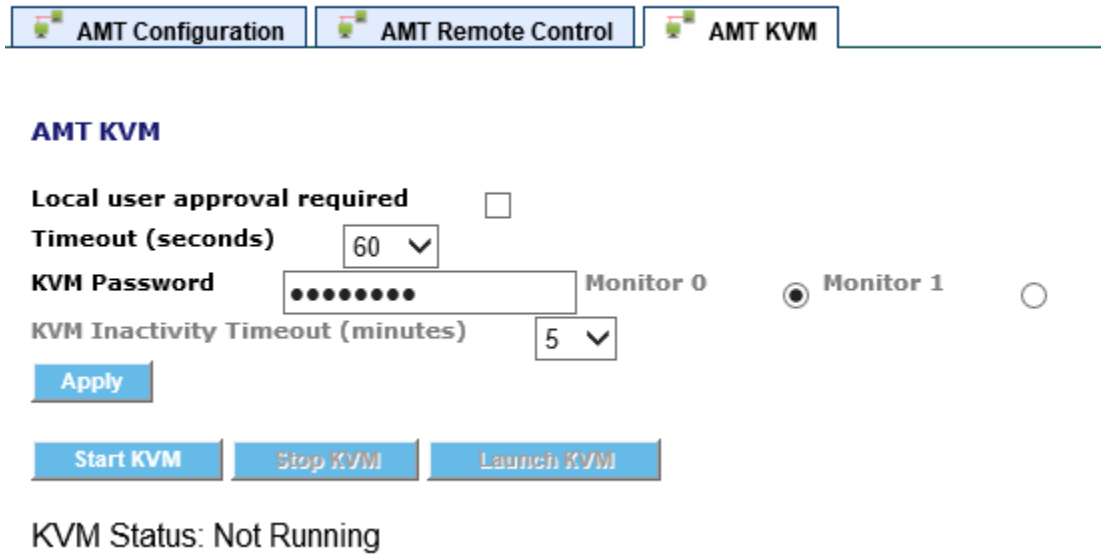

SyAM: System Area
syamappliance3:3930/Login
System Area Manager
Refresh
Log Out
Dashboard
Go
Remote Management : HPZ1-G2 (192.168.200.18)
Filter By
All
Group by
Operating System
Sorting
Host Name
Show All Matching Systems
Start Groups As Collapsed
Subgroup
Microsoft Windows 7 Enterprise 64-bit
X PETERTUERK-PC (192.168.200.105
X WIN7VBOX (192.168.200.73)
Microsoft Windows 7 Professional 64-bit
X HP-PC (192.168.200.88)
X SM3330 (192.168.200.74)
X WIN7X64 (192.168.200.90)
Microsoft Windows 7 Ultimate 64-bit
X SYAMAPPLIANCE3 (192.168.200.
Microsoft Windows 8 Enterprise 64-bit
X ELITEBOOK8570W (192.168.200.1
Microsoft Windows 8 Pro 64-bit
X HPZ230 (192.168.200.24)
Microsoft Windows 8.1 Pro 64-bit
X HPZ1-G2 (192.168.200.18)
Microsoft Windows Server 2008 R2 Enterprise 64-bit
X 100-200-GW (192.168.200.252)
X S2600CF (192.168.200.40)
Microsoft Windows Server 2008 R2 Standa 64-bit
X HP-HYPER-V (192.168.200.45)
AMT Configuration
AMT Remote Control
AMT KVM
AMT Remote Control
You may need to click on the SOL screen to ensure it is the active window.
Close SOL session
Intel Active Management Technology - Serial Over LAN operational mode.
BIOS Revision: L52 v01.11
BIOS Settings: <F10>
One Time Boot Menu: <F9>
Intel(R) AMT Client BIOS Setup Entry
Connected to syamappliance3 58900
online
Last updated via Send Command: Fri May 02 19:59:06 EDT 2014


System Area Manager
Refresh
Log Out
Dashboard
Go
Remote Management : HPZ1-G2 (192.168.200.18)
AMT Configuration
AMT Remote Control
AMT KVM
AMT Remote Control
You may need to click on the SOL screen to ensure it is the active window.
Close SOL session
Hewlett-Packard Setup Utility
File Storage Security Power Advanced
System Information
About
Set Time and Date
Flash System ROM
Replicated Setup
Default Setup
Apply Defaults and Exit
Ignore Changes and Exit
Save Changes and Exit
Activate Windows
Go to PC settings to activate Windows.

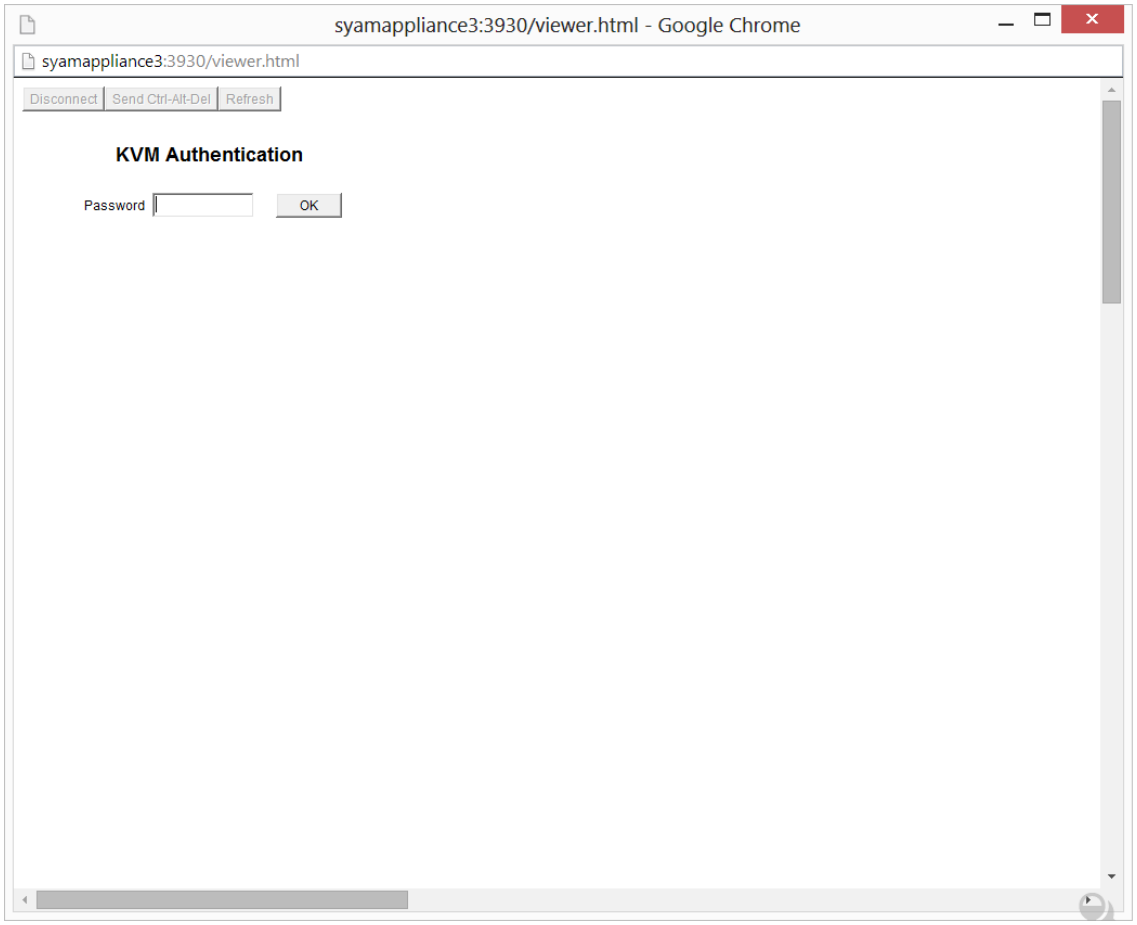
AMT KVM

With SyAM Software and the vPro ME configured on the HP Z1 G2 workstation you can KVM to the client machine.

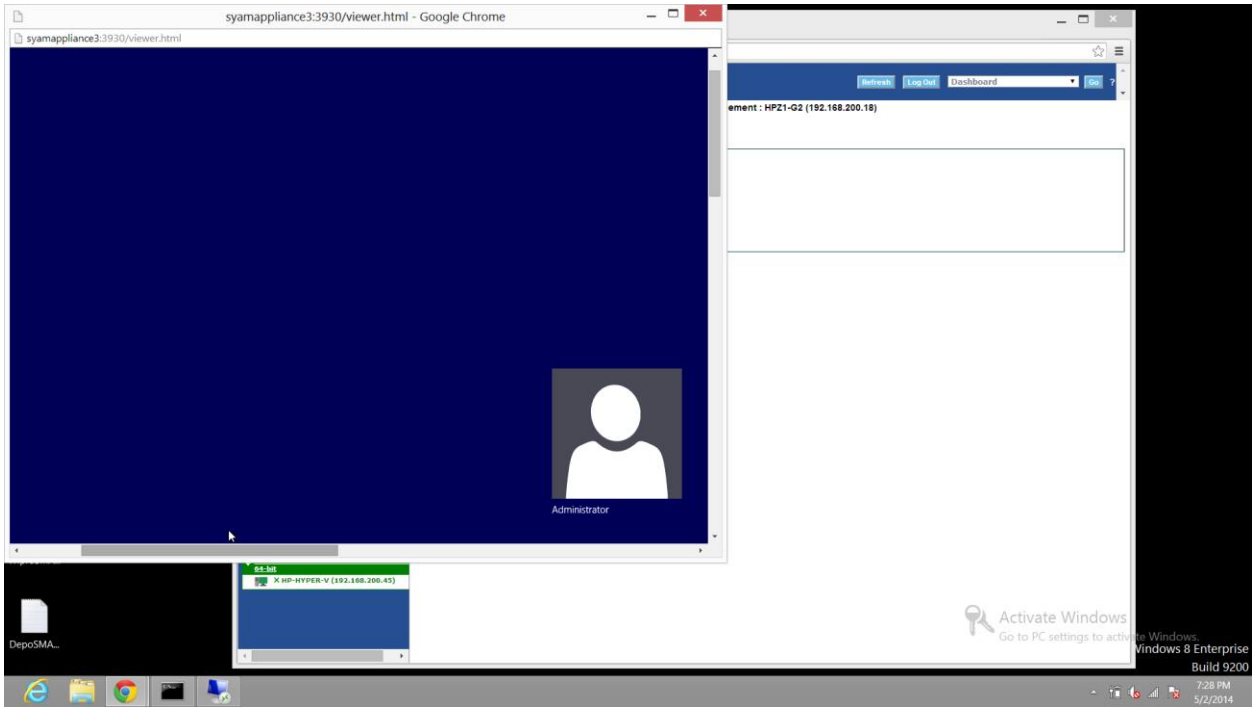
1. Click on AMT KVM; establish connection (NOTE: In order to use the KVM features it must be enabled in the Intel Management Engine and you must be using a processor that supports integrated graphics)
2. Set up a strong password in the KVM Password box (example: P@ssw0rd) and then click apply .



3. Next, click Start KVM and then click Launch KVM to start a KVM session. (NOTE: If a java security pop-up comes but be sure to select “no” as if “yes” is clicked then the KVM session will not connect and to re-enable the KVM session the system must be reset.)
4. This brings up another window and requires the password that was set up in a previous step.



5. Once the correct password is entered the KVM session will connect and the user will have complete control over the window that has been taken over.

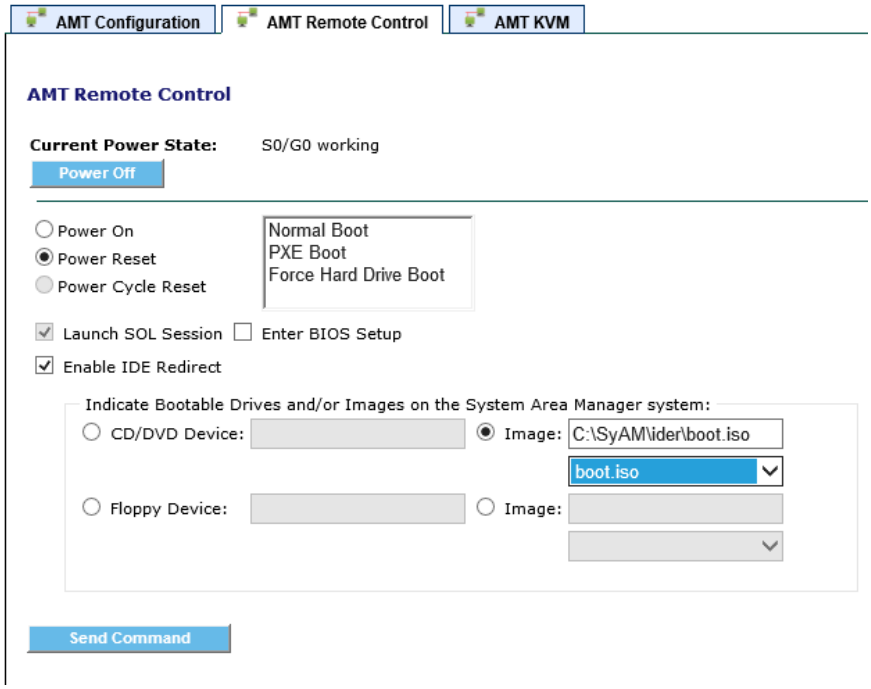

syamappliance3:3930/viewer.html - Google Chrome
syamappliance3:3930/viewer.html
Administrator
Refresh
Log Out
Dashboard
Go
ement : HPZ1-G2 (192.168.200.18)
64-bit
HP-HYPER-V (192.168.200.45)
DepoSMA...
Activate Windows
Windows 8 Enterprise
Build 9200
7:28 PM
5/2/2014

Z1 G2 vPro Enable IDE Redirect

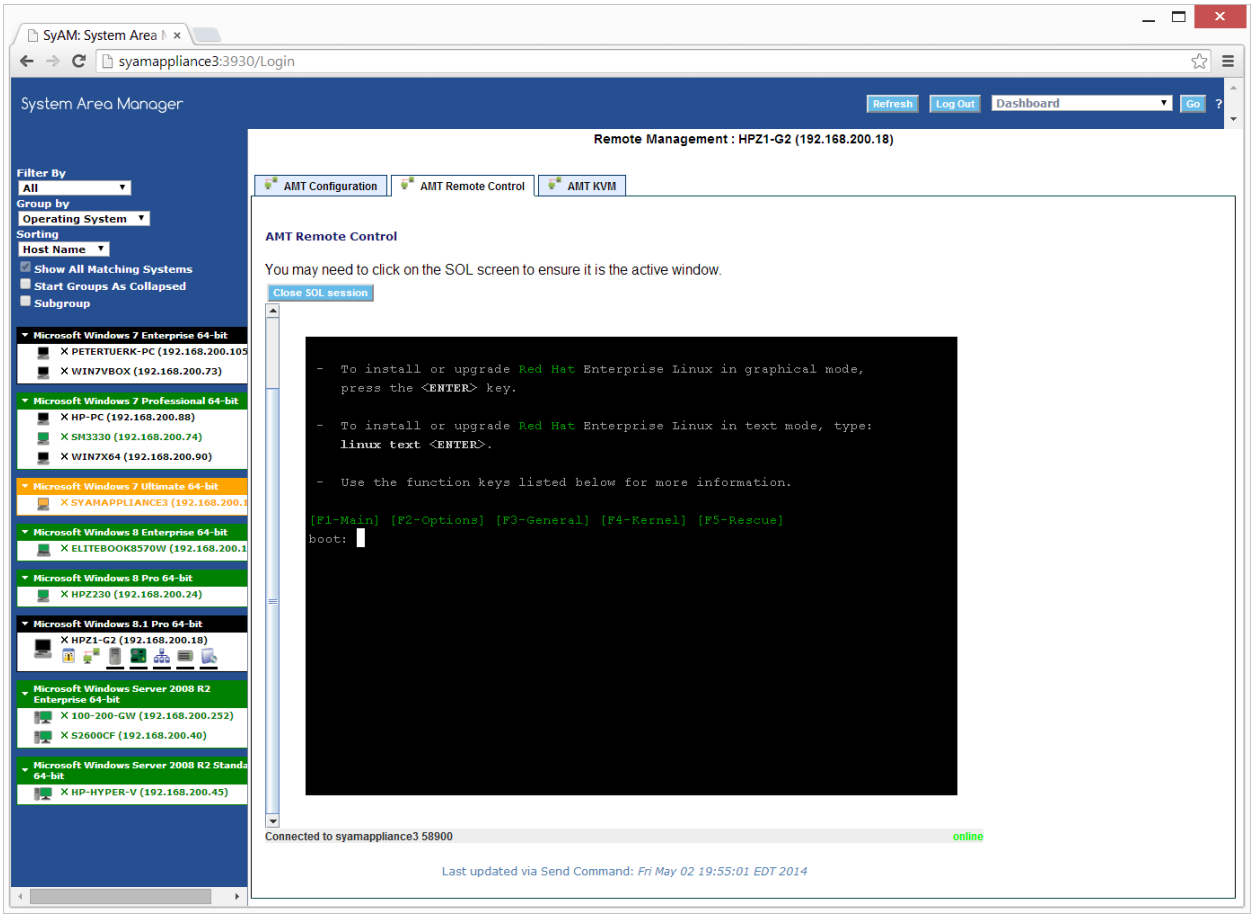
IDE-Redirect allows an AMT managed system on the System Area Manager tree to boot from an CD/DVD Image, Floppy image, floppy disk, CD or DVD device which is located in the system running System Area Manager. IDE-Redirect is only available when using SOL.

These drives or images are on the computer running System Area Manager, NOT on the computer running your web browser. The default folder for storing these images is c:\SyAM\IDER\

1. To invoke the IDE Redirect either click on the Power Reset or Power On buttons and click in the SOL and IDE-R check boxes. Under image chose one of the four options, Floppy Image, Floppy Drive, CD/DVD Image or CD/DVD Drive you want the system to boot from, and click 'Send Command'.



2. Click as the system boots from the SOL window to interact with the system.



3. Close the SOL Session once completed, remember to reset the system without IDE-Redirection otherwise it will continually boot from the IDE Redirection device.

4. To invoke the IDE Redirect either click on the Power Reset or Power On buttons and click in the SOL and IDE-R check boxes. Under image chose one of the four options, Floppy Image, Floppy Drive, IMG Image you want the system to boot from, and click 'Send Command'.